



March 19, 2018

/Via Electronic Filing/

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Promoting Investment in the 3550-3700 MHz Band*; GN Docket No. 17-258

Dear Ms. Dortch:

Starry, Inc. (Starry) writes to enhance the record in the above captioned proceeding regarding the disclosure of location information for registered Citizens Broadband Radio Service Devices (CBSDs) and performance requirements at renewal for Priority Access Licensees (PALs).

Specifically, we strongly urge the Commission to maintain at least some public disclosure of CBSD location information to allow all users of the Citizens Band Radio Service (CBRS) to effectively determine the availability of spectrum in the band across the country. This is especially important if the Commission adopts license sizes, in whole or in part, that are larger than census tracts. In addition, we suggest a market-oriented payment-based performance requirement for PALs at renewal that would require licensees to make rational business decisions about the going forward economic value of holding unused portions of a PAL.

I. BASIC CBSD LOCATION INFORMATION IS NECESSARY FOR ALL USERS

Some mobile operators have expressed concerns about publicly disclosing the locations of registered CBSDs. They generally raise security or competitive concerns.¹ The record explains why these concerns are misplaced,² including the fact that the providers themselves disclose the locations of their networks. In addition, public safety users and other critical infrastructure users have publicly disclosed their land mobile radio sites, including identifying the specific locations of transmitters, for decades without incident.

If the locations of registered CBSDs are entirely withheld from public view, new entrant CBRS users would lack information necessary to design and plan networks using the CBRS band. The

¹ Comments of AT&T, GN Docket No. 17-258, at 12-13 (Dec. 28, 2017); Comments of CTIA-The Wireless Association, GN Docket No. 17-258, at 11-12 (Dec. 28, 2017) (CTIA Comments); Comments of T-Mobile USA, Inc., GN Docket No. 17-258 at 13 (Dec. 28, 2017); Comments of Verizon, GN Docket No. 17-258, at 16-17 (Dec. 28, 2017).

² Comments of Dynamic Spectrum Alliance, GN Docket No. 17-258, at 22-25 (Dec. 28, 2017) (DSA Comments); Comments of Google, Inc., GN Docket No. 17-258, at 22-23 (Dec. 28, 2017); Comments of Open Technology Institute at New America and Public Knowledge, GN Docket No. 17-258, at 35-38 (Dec. 28, 2017) (OTI and Public Knowledge Comments).

three-tiered structure of the CBRS band is predicated on information about the locations of incumbents and registered CBSDs – both deployed in PALs or on a General Authorized Access (GAA) basis.³ Information about CBSD locations allows all users to determine the availability of spectrum in a geographic area, which is critical for planning and deploying networks. Potential CBRS users should not have to engage a Spectrum Access System (SAS) administrator to discover this information – the public has a right to know how its resource is being used.

This will be even more important if the Commission adopts license areas (in whole or in part) that are larger than census tracts.⁴ Larger license areas mean that there will inevitably be larger geographic areas that are unused by a PAL licensee.⁵ Proponents of larger license areas argue that secondary market tools – partitioning, disaggregation, and leasing – are effective solutions to provide licensed rights to users that demand smaller geographic areas.⁶ Setting aside the validity of the argument, without accurate information about the availability of spectrum within a PAL there cannot be a functioning secondary market. The economics here are simple – there would be no information regarding supply sufficient to make a market. Again, potential users should not have to go through a SAS administrator to find out even the most basic information about spectrum availability.

However, to the extent the Commission finds the arguments against publicly disclosing CBSD location information even somewhat persuasive, we suggest the Commission only partially obscure the location information. Partially obscuring the location information would protect the specific location of a CBSD, but still facilitate at least a basic analysis of the spectrum environment in a geography.

The Commission could obscure location information in several ways. For example, the SASs could generate three equally spaced geographic points (50 linear feet apart, for instance) to create a triangular area within or along which a CBSD is located. The result would be a series of coordinates that could be overlaid to give at least a general sense of the availability of

³ See *Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band*, WT Docket No. 12-354, Report and Order and Second Further Notice of Proposed Rulemaking, 30 FCC Rcd 3959, 4053-58 ¶¶ 319-33 (2015) (3.5 GHz First R&O).

⁴ We strongly support retaining census tracts as the geographic license area size, and using package bidding as the tool for larger providers to aggregate licenses. However, if the Commission pursues alternative license areas, we strongly suggest license area sizes smaller than PEAs, which are inappropriate for meeting the needs of all the users in the CBRS band. Aside from counties, which are still very large in rural and urban areas (the population of Los Angeles County exceeds 10 million), the Commission should consider other alternatives like ZIP Code Tabulation Areas (ZCTAs) or Public Use Microdata Areas (PUMAs). See ZIP Code Tabulation Areas, <https://www.census.gov/geo/reference/zctas.html>; Public Use Microdata Areas, <https://www.census.gov/geo/reference/puma.html>.

⁵ All other things being equal, a PAL licensee given the same amount of time to construct a network in a census tract versus a Partial Economic Area (PEA) will cover more of the census tract than the PEA.

⁶ See CTIA Comments at 10; Reply Comments of T-Mobile, GN Docket No. 17-258, at 10-11 (Jan. 29, 2018); Reply Comments of Verizon, GN Docket No. 17-258, at 10 (Jan. 29, 2018).

spectrum in an area. And for secondary market analysis of available PAL spectrum, it could also provide at least a baseline of the PAL licensee's deployment in the license area, and therefore what spectrum might be available in the secondary market or on a GAA basis.

The Commission could also simply randomize the specific CBSD coordinates by a variable amount (up to a maximum). For instance, the Commission could report (or require the SASs to report) a location that is somewhere between 0 feet and some maximum distance (again, notionally 50 feet) away from the actual coordinates. By drawing a circle with a 50-foot radius (or whatever the maximum) around the point, a CBRS user could identify the general area within which the CBSD could be located. Mapping these areas would, like the triangular areas, provide at least some sense of the spectrum availability in a geography.

In both instances, the PAL licensee would be protected against the argued competitive or security harms of reporting a specific location, while other users can determine, albeit crudely, the general availability of spectrum in a specific area. SASs would continue to have and exchange the specific coordinates of each registered CBSD among themselves and with the Commission. All other registration information, save for registrants' names, would still be publicly reported.⁷

To be clear, the best approach is to continue to require the public disclosure of specific coordinates of registered CBSDs. Neither of the solutions we have offered are optimal, but some information is markedly better than no information.

II. PAYMENT CAN SERVE AS A PERFORMANCE REQUIREMENT FOR RENEWABLE LICENSES

If the Commission decides to extend the license term and allow license renewal, the record supports imposing performance requirements.⁸ Below we offer a suggestion for a performance payment upon renewal as a flexible and administrable solution.

CBRS is designed to meet myriad use cases simultaneously. Crafting a performance requirement that can accommodate these uses cases is extremely difficult, as the Commission has found in the *Spectrum Frontiers* proceeding.⁹ It would also be incredibly time consuming

⁷ Including antenna height, CBSD class, requested authorization status, FCC identification number, call sign, air interface technology, serial number, and sensing information about the CBSD. 47 C.F.R. § 96.39(c).

⁸ See Reply Comments of Cantor Telecom Services, L.P., GN Docket No. 17-258, at 5-6 (Jan. 29, 2018); Reply Comments of California Internet, L.P. d/b/a/GeoLinks, GN Docket No. 17-258, at 4 (Jan. 29, 2018); Reply Comments of CTIA-The Wireless Association, GN Docket No. 17-258, at 2 (Jan. 29, 2018); Reply Comments of NCTA-The Internet and Television Association, GN Docket No. 17-258, at 7-8 (Jan. 29, 2018); Comments of Charter, GN Docket No. 17-258, at 4-5 (Dec. 28, 2017); Comments of Comcast, GN Docket No. 17-258, at 20 (Dec. 28, 2017); DSA Comments at 11; Comments of the City of New York, GN Docket No. 17-258, at 3 (Dec. 28, 2017); OTI and Public Knowledge Comments at 34.

⁹ *Use of Spectrum Bands Above 24 GHz, et al.*, Second Report and Order, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, and Memorandum Opinion and Order, 32 FCC Rcd 10988, 11020-22 ¶¶ 98-104 (2017) (seeking even further comment on additional performance metrics for millimeter wave bands).

to review “substantial service” filings, and substantial service has been an objectively ineffective performance requirement.¹⁰

Instead of a use-based performance metric at renewal, we suggest the Commission consider a payment-based performance metric. A payment-based performance metric provides maximum flexibility to all licensees, without requiring the Commission to either create multiple different performance requirements or one generic and ineffective performance requirement. It is also easy to administer and enforce, especially relative to potentially tens of thousands of renewal filings. And unlike other bands, CBRS is uniquely designed to ensure that the spectrum is used if a licensee chooses to simply make the performance payment and not construct a network – GAA ensures robust use of spectrum that would otherwise lay fallow.

The pay-for-performance renewal requirement could be structured as follows. Within the renewal period, the Commission could require each PAL licensee to make a payment to the U.S. Treasury equal to the licensee’s winning bid at auction for the license.¹¹ If the Commission adopts license areas larger than a census tract, the payment could be prorated equally among the census tracts that make up the license. The licensee would then make an active choice at the end of the license term whether it values each tract sufficient to make the payment. If it chooses not to make the pro-rata payment for a census tract, it would lose the tract, which would then be immediately available for GAA and could be included in a subsequent PAL auction.

This concept preserves the economic incentive-based model on which CBRS is founded – that licensees can make rational economic decisions about the actual cost of holding a license, and commit to its value by making a payment. Under this proposal, an applicant that is the highest bidder at auction would pay the full amount of the winning bid at the conclusion of the auction. If the Commission grants its long form application, the licensee would hold the license free and clear. The licensee’s full right to the license is established then, not later upon a payment. And over time, it can make an economic decision, on a census tract-by-census tract basis, whether it values each geographic subsection of its license. We believe this structure is consistent with the Telecommunications Act of 1996 (the Act), Bankruptcy Code, and relevant precedent.

A. Payment-as-Performance Meets the Requirements of The Act

Using payment-for-performance is entirely consistent with the requirements of Section 309 of the Act. Section 309(j)(4) explicitly requires the Commission to include performance

¹⁰ See Straight Path Communications Inc., Ultimate Parent Company of Straight Path Spectrum, LLC; Straight Path Spectrum LLC, File No.: EB-SED-16-00022575, *Consent Decree*, DA 17-40 (EB, Jan. 11, 2017); FiberTower Spectrum Holdings, et al., *Order on Remand and Memorandum Opinion and Order*, DA 18-78 (WTB, Jan. 26, 2018). We note that SASs could play a helpful role in administering and enforcing substantial service performance requirements if adopted.

¹¹ The performance payment could also be increased by a percentage equal to the increase in the Consumer Price Index over the same period.

requirements “such as appropriate deadlines and penalties for performance failures.”¹² Performance requirements must be designed to ensure prompt delivery of services to rural areas, prevent stockpiling and warehousing, and “promote investment in and rapid deployment of new technologies and services.”¹³

Using a payment-as-performance for renewal clearly meets these requirements. It is explicitly designed to make sure that the licensee is choosing to use the spectrum rather than stockpile or warehouse it, because doing so comes at a real cost.¹⁴ In addition, under traditional performance requirements based on population metrics, rural areas tend to be the least likely to be served.¹⁵ Assuming a licensee, such as a mobile wireless provider, finds no revenue incentive to deploy in a rural area, it can relinquish that part of the license and make it available to another provider that may have a different economic structure such that it is able to serve the area.¹⁶ Finally, if a census tract is relinquished, all the spectrum would be available for GAA use immediately, and the subsequent PAL auction would include the relinquished census tracts. This will facilitate low-barrier access, either on a GAA basis or on a PAL basis, in small geographies for a wide variety of users.

The Commission uses performance requirements as the basis for safe harbors for granting license renewals.¹⁷ The Commission requires licensees to meet some type of performance requirement to exercise the right to renewal.¹⁸ The theory is that the licensee is awarded the right to another license term by its demonstration that it values and is using the license. The performance requirement is part and parcel of the exercise of a regulatory right, and payment-as-performance serves this purpose.

B. Payment-as-Performance is Not an Installment Payment or a Debt

A licensee making a payment to demonstrate performance is not an installment on a winning bid, nor does it constitute a debt dischargeable in bankruptcy. There are two key differences between an auction-generated installment payment and a performance payment to exercise

¹² 47 U.S.C. § 309(j)(4).

¹³ *Id.*

¹⁴ Additionally, even if a licensee chooses to hold the license without using it because it values it for some reason other than the revenue it may generate from it, the license area would still be available for GAA.

¹⁵ See Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95, and 101 to Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules and Policies for Certain Wireless Radio Services, WT Docket No. 10-112, *Second Report and Order and Further Notice of Proposed Rulemaking*, 32 FCC Rcd 8874, 8911 ¶ 99 (2017) (*WRS Renewal Second R&O and FNPRM*).

¹⁶ Of course, the licensee could sell the spectrum right in the secondary market before the performance payment becomes due.

¹⁷ See 47 C.F.R. § 1.949; *WRS Renewal Second R&O and FNPRM*.

¹⁸ 47 C.F.R. § 1.949(e).

the right of renewal: 1) the full license rights vest at the time of license grant; and 2) the FCC does not have a claim against the performance requirement.

Once the winning bidder's long form application is granted after the conclusion of the auction, the licensee holds all the rights and must meet all of the obligations of the license. The full payment is made and the full rights are granted – there is no future payment to secure a license right. The future payment-for-performance is part of the right to renew the license at the end of the license term. The right to renew a license is an option on the future opportunity to extend the license for successive license terms.

Renewal is always predicated on meeting some performance requirement, like constructing a network and providing service to a percentage of the population or deploying a minimum number of fixed links.¹⁹ Renewal is neither guaranteed nor required – licensees can choose to not renew licenses, and the Commission can find that the licensee failed to meet the renewal standard and deny the renewal request.²⁰ Performance requirements and renewal are legally bound – renewal is predicated on performance.

If a license renewal granted upon meeting a payment-based performance requirement was determined to be an obligation, not a right, then the same would be true of all performance requirements. The only significant difference between population- or geographic-based performance requirements and payment-for-performance is that the performance would come in the form of a monetary payment to the Treasury versus network construction. The licensee is making the same business decision whether it values the license sufficiently to meet its performance requirement and renew the license. The performance requirement upon renewal is such an integral part of renewal that the two cannot be separated.

In *FCC v. NextWave*, the Commission granted NextWave's licenses conditioned upon the future installment payments of NextWave's winning bid.²¹ In that case, the Supreme Court found that an installment payment for a spectrum license won at auction is a debt that can be discharged in bankruptcy.²² Under the payment-as-performance structure, there would be no promissory notes or need to secure any debt because the full license right is granted and paid for upon the conclusion of the auction – it is not subject to any future payment.

If the licensee enters bankruptcy proceedings after its license grant, there is no dischargeable debt associated with the license simply because the licensee holds a right to make a future

¹⁹ See 47 C.F.R. §§ 1.949, 27.14.

²⁰ See *id.* § 1.949.

²¹ *FCC v. NextWave Personal Comm. Inc.*, 537 U.S. 293, 296-98 (2003). After winning the auction, "NextWave made a down payment on the purchase price, signed promissory notes for the balance, and executed security agreements that the FCC perfected by filing under the Uniform Commercial Code." *Id.* at 296-97.

²² *Id.* at 301-04.

payment to renew the license.²³ Section 525 of the Bankruptcy Code defines a debt as a “liability on a claim,” and a claim is a “right to payment” or a “right to an equitable remedy for breach of performance if such breach gives rise to a right to payment.”²⁴ If a licensee chooses not to make the payment, it relinquishes the license not to resolve a claim, but because it made a business decision that it did not want to exercise its right to renew the license. The FCC has no claim to that future payment.

C. Payment-as-Performance is Not a Spectrum Fee

Finally, the performance payment is not a fee. The Commission has the statutory authority to collect application fees for a variety of purposes and across a variety of services.²⁵ The absence of explicit authority to collect a spectrum fee has historically been interpreted to mean that the Commission cannot collect fees for the use of spectrum.

A fee is a cost recovery mechanism that applies to certain applications and regulatory activities.²⁶ As discussed above, the performance payment is not an obligation, but commensurate with a right. A licensee is not required to make the payment, and the amount of the payment is tied to the licensee’s winning bid and is unrelated to any identifiable FCC activity. The payment-for-performance is as much a fee as is the cost of building a network to meet the construction-based performance requirement typically imposed at license renewal.

III. CONCLUSION

For the foregoing reasons, we urge the Commission to take these practical steps to preserve transparency and efficiency in CBRs, to the benefit of all users.

Respectfully Submitted,



Virginia Lam Abrams
Senior Vice President, Communications and Government Affairs
Starry, Inc.

²³ Because the future performance payment for renewal is not a debt, Section 525 does not otherwise limit the FCC’s ability to act as a creditor with respect to the license. In the relevant part, Section 525 of the Bankruptcy Code reads: “[A] governmental unit may not . . . revoke . . . a license . . . to . . . a person that is . . . a debtor under this title . . . solely because such . . . debtor . . . has not paid a debt that is dischargeable in the case under this title . . .” 11 U.S.C. § 525(a).

²⁴ 11 U.S.C. § 525(5), (12).

²⁵ 47 U.S.C. § 158.

²⁶ *Id.* §§ 158, 159.